PAC00 Add-On Intercept: Overview

The 1996 Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA) requires each regional Fishery Management Council to consider the effects of its regulations on fishing communities as well as fishery participants. In recent years, declining abundance of many federally managed fish stocks have resulted in more restrictive regulations for both commercial and recreational fisheries. In some instances (e.g., the striper and bluefish fisheries on the North Atlantic and Mid-Atlantic coasts), these harvest restrictions have resulted in heightened awareness of the recreational fishery, both as a source of fishing mortality and as a fishery sector likely to be impacted by regulations. This economic survey is intended to help address regulatory requirements of the MSFCMA by (1) providing the data needed to estimate economic impacts of the saltwater recreational fishery on coastal economies of the Pacific coast. The survey data will also be used (2) as a basis for comparison with saltwater fishing expenditures estimated by the U.S. Fish and Wildlife Service (USFWS) in its National Survey of Fishing, Hunting and Wildlife-Associated Recreation, and (3) to estimate a Random Utility Model of angler decisions regarding fishing site, mode and target species for one-day fishing trips.

The economic data will be collected as a supplement to the Marine Recreational Fishery Statistics Survey (MRFSS), a survey sponsored annually by the National Marine Fisheries Service, which provides estimates of aggregate marine recreational harvest and effort in designated coastal sub regions of the U.S. On the Pacific coast, the MRFSS covers all west coast states with the exception of Alaska and Hawaii. The MRFSS consists of two components: a random telephone survey and a creel survey.

The MRFSS Telephone Survey is a random survey of coastal county households which is conducted at two-month intervals throughout the year. Household members identified in the MRFSS Telephone who had gone saltwater recreational fishing in the previous two months are asked details of each day fished during that time period. The proportion of total household contacts that include at least one two-month angler and the mean number of angler days per angling household (as estimated from the MRFSS Telephone for each two-month survey wave), together with U.S. Census data on total numbers of households residing in coastal counties, are then used to estimate the aggregate number of angler days fished by coastal county residents during each survey wave.

The MRFSS Intercept Survey is a creel survey in which anglers are intercepted and interviewed at fishing sites. The Intercept sample is stratified by survey wave, sub region, and fishing mode. Data collected in the MRFSS Intercept on the angler's county of residence are used to estimate the proportion of angler days accounted for by non-coastal county residents, which is then used to expand the estimates of aggregate fishing effort by coastal county residents (as derived from the MRFSS Telephone) to include non-coastal county residents. The MRFSS Intercept also provides estimates of the numbers and species composition of fish caught per angler day. These estimates of mean harvest per angler day, combined with estimates of the aggregate number of angler days (as described previously), are used to calculate aggregate harvest by subregion, species category, fishing mode and survey wave.

GENERAL APPROACH AND SAMPLING STRATEGY

The economic survey will include three components: (1) add-on questions to the MRFSS Intercept Survey (hereafter referred to as the Intercept Add-On), (2) a telephone interview administered as a follow-up to the Intercept Add-On (hereafter referred to as the Telephone Follow-Up), and (3) add-on questions to the MRFSS Telephone Survey (hereafter referred to as the Telephone Add-On). Data gathered in the Intercept Add-On and Telephone Follow-Up will be used to address the three objectives described in Section 1.0. Some of the questions asked in the Intercept Add-On and Telephone Follow-Up will be replicated in the Telephone Add-On for the purpose of evaluating and addressing potential sources of bias in the other two surveys. Because the economic survey will be conducted as a supplement to the MRFSS, maximum sample sizes for the Intercept Add-On and Telephone Follow-Up will be determined by the base sample size for the MRFSS Intercept Survey, and for the Telephone Add-On by the base sample size for the MRFSS Telephone Survey.

Add-On to MRFSS Intercept Survey

The MRFSS Intercept Survey requires that all interviews, except for a limited number of shore mode interviews, be conducted with anglers who have completed their fishing trips. The Intercept Add-On questions will be administered to MRFSS Intercept anglers who: (1) are at least 16 years of age, and (2) provide responses to all "key" data elements on the base MRFSS Intercept survey instrument (key elements being date, fishing site, mode and target species of intercepted trip, zipcode of residence and number of days fished in the past two and twelve months).

The Intercept Add-On questions will be asked after the base MRFSS Intercept questions but before examining the catch. This sequence will not be followed if it is expected to decrease the likelihood of the catch being examined. However, to the extent that it does not affect catch examination, this sequence is expected to improve the flow of the interview and the response rates to the economic questions. Anglers will not be told these are additional questions; rather the Add-On will appear to be a normal part of the MRFSS Intercept interview. The Intercept Add-On database will include an identification code that allows the information provided by Add-On respondents to be linked with their responses to the base MRFSS Intercept.

Interview Justification

Each item in the intercept survey will be used for at least one of two purposes. Every item can be used to develop a descriptive understanding of anglers and fishing trips. A subset of these items will also be used in the development of economic models to estimate the value and economic impacts of saltwater recreational fishing in each Region. Information from individuals not targeting the selected species can be used to develop separate angler and trip profiles and as a potential way in which angler participation rates may be incorporated into the economic valuation model. In addition, by collecting information on individuals not targeting these species, sample statistics can be used to test for any sample selection biases that may be created by focusing only on a subset of species targeted by anglers. Lastly, information collected from anglers not willing to release their name and phone number will be used to test for statistical differences between them and anglers willing to release this information.